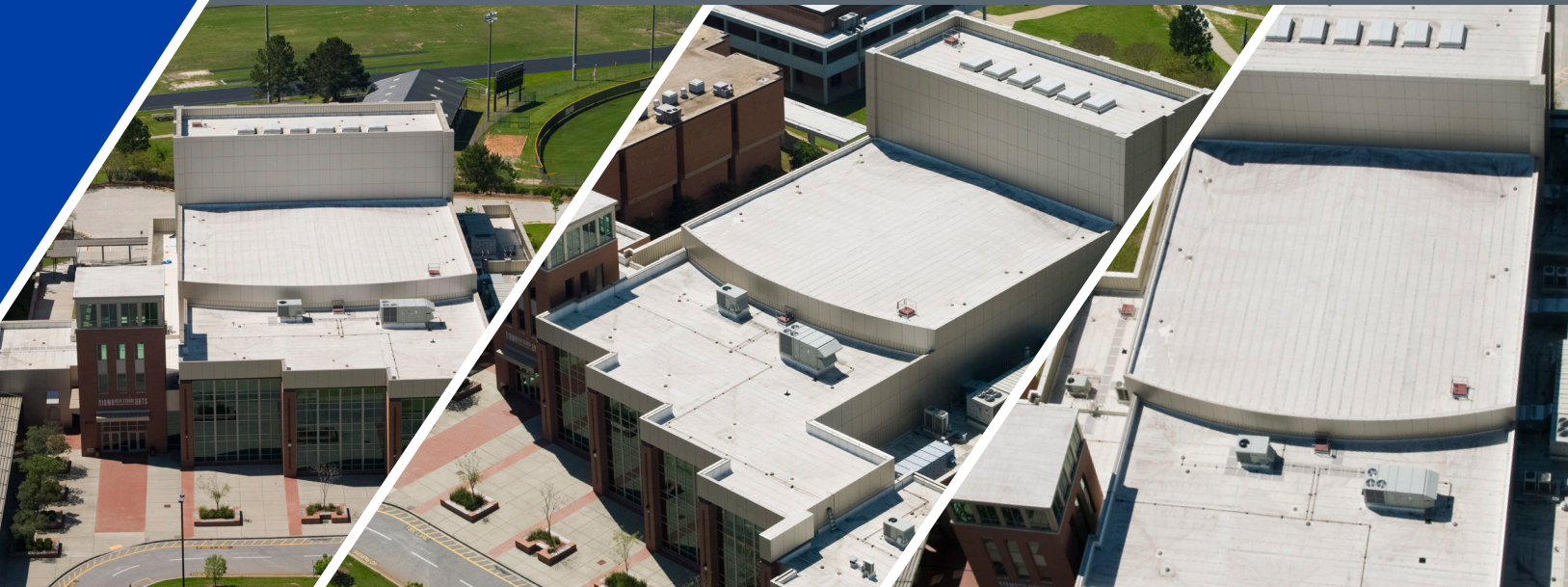




JOHNS MANVILLE WINS LARGE COOL ROOF PROJECT

Teamwork between the client, contractor, and JM produces successful energy efficient project



Description: About half of the schools' total roof area at the Dutch Fork High School campus in Irmo, South Carolina was due for a new roof. Representatives from School District Five of Lexington & Richland Counties worked with a roofing consultant to specify that the new roof area be ENERGY STAR® compliant and LEED certified. The first phase of the job covered 87,500 square feet that spanned over nine different roof areas.

Challenge: Representatives from the school district, a roofing consultant, and contractor Aqua Seal Manufacturing & Roofing had to come up with a complete system which included a lightweight insulating concrete (LWIC) substrate. Johns Manville (JM) supplied the roofing products, ensuring the entire job could be guaranteed. While the re-roofing project was going on, numerous other trades were working on HVAC and interior work, all while navigating a summer school session with student safety at the forefront. The busy construction setting added more layers to these complex logistics.

Solution: Nine different roof areas had existing gravel surfaces and years of accumulated debris to be vacuumed, along with flashing that needed to be removed before the moisture testing could be completed. Testing determined that more than 90 percent of the insulation was dry and could stay in place. Being able to retain the existing insulation offered many benefits, including an increase in the R-value when combined with the LWIC, reduced time each section was being worked on and exposed to the elements, and reduced waste to the landfill. It also complemented the school district's goal of having a highly efficient roof system with an ENERGY STAR® rating.

After fixing the trouble spots, raising roof curbs for the exhaust fans and plumbing stacks, and tending to any other penetrations, the surface was ready for the LWIC and the JM DynaGlas® FR CR G cool roof membrane. When it was time to flash the roof, JM Technical Field Representatives were on-site to provide training to the Aqua Seal team, who were applying the JM PMMA flashing system for the first time. That level of support from JM ensured that the school district's 20-year NDG guarantee covered all the flashings that were installed with JM PMMA. The experience JM brought, along with an understanding of the area's fluctuating temperatures and generally high humidity, led to setting up the right mix as quickly as possible to get this crucial application down.

Aqua Seal Vice President Steve Riha had this to say about how well JM performed on this job, "Everyone at JM is a pro at what they do. How they handled this job was no exception. We never had to wait on products, and they were there for all inspections, which this job passed with flying colors."

Completed in October 2019, Johns Manville, Aqua Seal, and Dutch Fork High School representatives wrapped up yet another successful project. According to Facilities Manager Gary Murphy, "As expected, Aqua Seal performed well, and the job went smoothly. JM did great too. They were on-hand whenever we needed them, including inspections. I can't think of one thing that could have been done better. The job went that well."

Location:
Irmo, SC

Contractor:
Aqua Seal Manufacturing & Roofing, Inc.
Steve Riha, Vice President
JM Peak Advantage® Summit Club® Contractor

Building Representative:
School District Five of Lexington &
Richland Counties
Gary Murphy, Facilities Manager

Industry Affiliations:
National Roofing Contractors Association

JM Roofing System Solution (3FID-CA):
20-Year Peak Advantage®

PermaPly® 28
DynaBase®
DynaGlas® FR CR G
MBR Cold Application Adhesive
JM PMMA Liquid Membrane Flashing

